# **Cairo University Faculty of Computers and Artificial Intelligence**



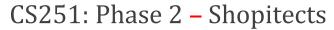
# Intro. to Software Engineering CS251

Software Requirements Specifications

Version 1.0



Name	Email
Alan Samir Hakoun	alanhakoun@gmail.com - 01006891062
Sohaila Abdelazim Khalifa	sohailakhalifa03@gmail.com
Sara Tamer Mohamed Bihery	sasooelbihery@gmail.com







# **Software Requirements Specifications**

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Project: SUGARLUSH



# **Software Requirements Specifications**

#### **Team**

ID	Name	Email	Mobile
20210755	Alan Samir Hakoun	alanhakoun@gmail.com	01006891062
20210492	Sohaila Abdelazim Khalifa	Sohailakhalifa03@gmail.com	01278489956
20210155	Sara Tamer Mohamed Bihery	sasooelbihery@gmail.com	01274239962

### **Document Purpose and Audience**

#### **Purpose**

This document is meant to explain the software requirements which are set by the product owners.

The functionalities and the scenarios will be clarified so the software engineers develop an accurate application that satisfies the owners as well as users.

#### **Audience**

- Product owners
- Software Development team

#### Introduction

#### **Software Purpose**

The purpose of this software is to give the customer the feature of shopping using a web or mobile app and order the goods as sweets he/she needs which facilitates the process of buying and improves the income of the business as well.

#### **Software Scope**

<u>SugarLush project</u> is an e-commerce web site that allows the customers of the business to buy different sweets with various methods like viewing the catalog of items, using gift vouchers on the order or reordering the same order again. The system also supports several ways of payments. In addition to the customer methods to deal with the system, the project would give the system admin different functionalities to monitor the system. Also, the system would be adopted working in web or mobile application, supporting both android and iOS.

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# **Software Requirements Specifications**

# Definitions, acronyms, and abbreviations

	Word/Phrase	Definition
1.	ОТР	One-time password
2.	e-wallet	Type of electronic card which is used for transactions made online through a computer or a smartphone. Its utility is the same as a credit or debit card. An E-wallet needs to be linked with the individual's bank account to make payments.
3.	Gift Vouchers	It is a unique code and can be redeemed once when making an order to reduce the total price by the value of the voucher.
4.	Scheme	A plan of action set by an admin usually follows certain consequences.
5.	e-commerce	It means the process of buying goods and services on the internet.
6.	Backup	The system responsibility to take copies of data, such that it may be restored to a working state.
7.	Performance	It defines how fast a software system or a particular piece of it responds to certain users' actions under a certain workload.
8.	Scalability	It assesses the highest workloads under which the system will still meet the performance requirements.
9.	Maintainability	It defines the time required for a solution or a component to be fixed.
10.	Platform compatibility	It defines how a system can coexist with another system in the same environment.
11.	Security	It assures that all data inside the system or its part will be protected against malware attacks or unauthorized access.
12.	Usability	Addresses a simple question: How hard is it to use the product?

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# **Software Requirements Specifications**

# Requirements

### **Functional Requirements**

Requirement ID	Requirement Description		
FR01	Every customer should have an account to gain full access, the customer must register with his name, email, address, valid password, and verify via OTP		
FR02	If a customer does not have an account, he will be restricted to only view items.		
FR03	Customer can edit his account info and password.		
FR04	If a customer forgot his password, a mail will be sent to his email so he can update his password.		
FR05	Customers can search for goods by item name or brand, they can display the catalog either by category or for a specific item.		
FR06	Customers can add to their cart the goods they want, they can add up to 50 kilos of loose goods, and up to 50 units of sealed goods, when they finish, they can do a check out. If the customer ordered more than 10kg of product, then no payment on delivery can occur, he/she should pay in advance using any of the other 3 payment methods.		
FR07	During the checkout step the customer is being asked again about the address the order would reach on. The customer would specify the address; either the same address registered on his/her profile or another new address.		
FR08	As the customer orders each time an order, he gets some loyalty point on his account in the system. These loyalty points are being updated by each order made and it could be used by the customer as a means of payment.		
The application must provide the following payment methods:  1. Cash payment on delivery  2. E – wallet  3. Redeem voucher  4. Loyalty points			
FR10	The system should provide the option of using gift voucher code, yet only once redeemed on an order. This would update with reducing the total price the customer should pay at during the payment step. Vouchers have an expiry date.  If the customer uses a voucher of higher amount, then required in the checkout process the amount is deducted from the voucher and a new voucher is created with theremaining amount.		
FR11	If the payment method is on delivery, the customer should enter a valid phone number. This would be verified by sending an OTP to the customer entered number. The customer has to enter the OTP to the system to proceed with the process.		

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# **Software Requirements Specifications**

FR12	The software would allow the customer to view his order's history. Also, he can reorder one of his pervious orders through a button called "reorder". This function allows the customer to order the exact pervious order with the same conditions including the quantities, address and way of payment shown in the previous order history. Yet the system makes sure first of the availability of the product currently.
FR13	The customer can cancel the order made within 24 hours only, if the payment method was by an e-wallet the money would be returned as loyalty points in his profile, else if paying on delivery the payment is cancelled.
FR14	<ol> <li>The software should allow the admin to:         <ol> <li>Modify the catalog by: Adding a new item or category and canceling existing items (this causes the item to be out of stock in the catalog).</li> <li>Updating the information of the item such as its name, category, description, image, brand, price and a discount percentage (if any).</li> <li>Add offers on some elements each month.</li> </ol> </li> </ol>
FR15	The system allows the admin to view all orders done by different customers, access users and other admins too.
FR16	<ul> <li>The system allows the admin to set up a loyalty points scheme for customers on each order, also the loyalty points have no expiry date.</li> <li>The scheme of the points is: <ul> <li>If payment is done using an e-wallet directly 15% of the amount is returned to the customer profile as points.</li> <li>If payment is on delivery 5% of the amount is returned to the customer profile as points.</li> </ul> </li> </ul>
FR17	The admin can suspend or ban a customer if he/she has done a forbidden behavior and he/she cannot login to the profile in the system again.
FR18	The admin can view sales statistics that provides owners with essential conclusions and the statistics may include:  1. Daily sales. 2. Monthly sales. 3. Sales of each item in a period of time. 4. Most popular products. The admin also can view his own statistics about doing the previous operations.
FR19	The admin decides the amount of delivery fee added when the payment is on delivery, else the delivery fee is a fixed amount when prepaid.
FR20	The Business owner has all the functional requirements of the admin in addition to he can control admins by adding or removing any admin.

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# **Software Requirements Specifications**

# **Non-Functional Requirements**

Measure	Details		
Backup	All user profile and order data must be backed up.		
Performance	<ul> <li>The time consumed to:</li> <li>Do any online payment method must take less than 5 seconds to finish.</li> <li>Fetch order data from database must take less than 1 second.</li> <li>Signing in or log in shouldn't take more than 1 second.</li> </ul>		
Scalability & Reliability	The application should be able to deal with up to 1000 simultaneous customers & be able to handle large numbers of orders without failing. The application should be reliable and available to the customers 24/7. Moreover, faults should be automatically detected and reported if they go outside the expected result.		
Maintainability	System design must be maintainable so that any problem can be fixed in a maximum of 24 hours.		
Platform compatibility	<ul> <li>The application should be available on:</li> <li>Android OS starting from version 4.0 onwards.</li> <li>IOS starting from version 8.0 onwards.</li> <li>Google chrome starting from version 55.0 onwards.</li> <li>Firefox starting from version 66.0 onwards.</li> <li>Edge starting from version 90.0 onwards.</li> </ul>		
Security	User profile data and credit card information should be encrypted. Also, the system should ensure only authorized users are able to access several functionalities.		
Usability	<ul> <li>The system should have the following properties:</li> <li>The error rate of customers signing in/up should be less than 5%.</li> <li>Time taken by a customer to fill in their account details should not be more than 2 minutes.</li> <li>Time taken by an admin to add/edit a new item should take 3 minutes at most.</li> <li>Time taken by a customer to search for a desired item should not exceed 10 seconds by filtering methods.</li> <li>Time taken by a customer to order and checkout his order should be less than 10 seconds.</li> <li>The error rate of customers making an order should be less than 2%.</li> <li>Time taken by a customer to check his orders state or order history shouldn't take more than 5 seconds.</li> </ul>		

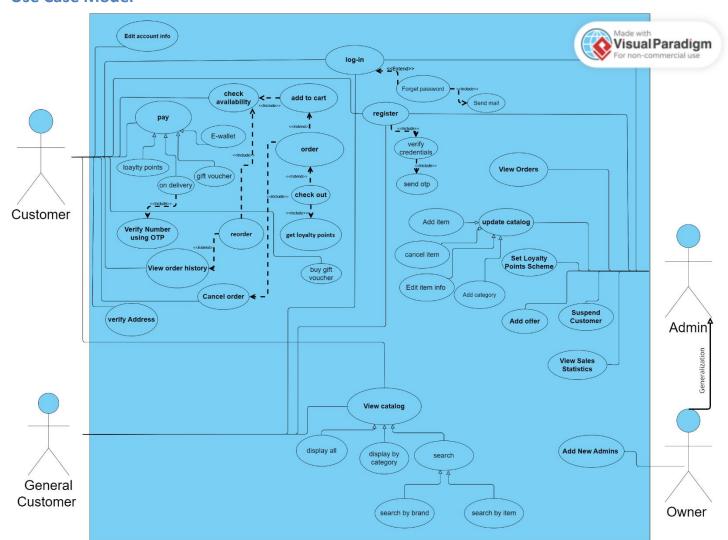
# **System Models**

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# **Software Requirements Specifications**

#### **Use Case Model**



#### **Actors:**

**General Customer:** Any user that uses the website to just view the catalog items, yet to buy any product he/she should register and login to the system.

**Customer:** A registered user who uses the system is able to search through the applications catalog, make orders and pay via different payment methods.

**Admin:** The admin is a person who can monitor the system. The main role is to add, cancel or edit items in a catalog. He/she can view all orders, set up a loyalty points scheme, suspend a customer and view statistics of daily, monthly or specific product sales.

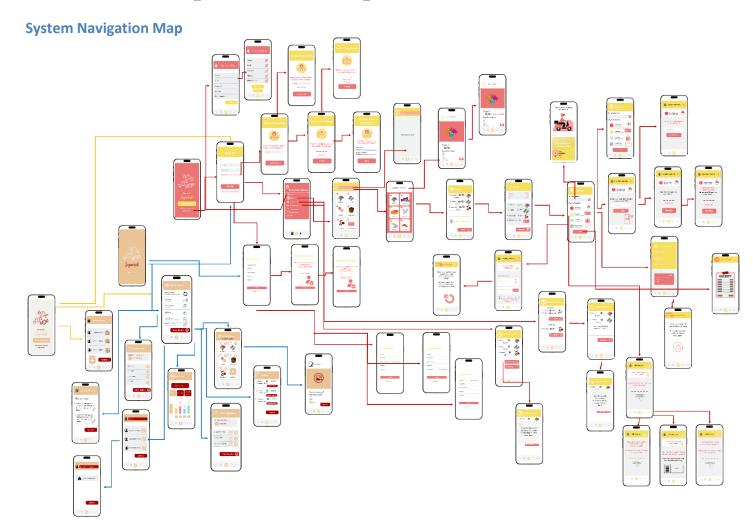
**Owner:** The business owner can monitor the system as well as the admin, in addition to that he can add or remove any admin.

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# **Software Requirements Specifications**



-NOTE: Please refer to the attached photo in the file for better quality and navigation.

#### **Tools**

- Visual-Paradigm designing use case Model.
- Canva designing the application interfaces & navigation map.

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# Software Requirements Specifications Enriched User Stories

### User Story # 1

User Story ID	US#1
<b>User Story Name</b>	Registration
Actors	General customer
	<b>As</b> a general customer
Description	I <b>like</b> to be able to register and create a new account
	<b>So,</b> I can create an account that grants full access of the application
Pre condition	
Post condition	
	<b>Given</b> I'm a general customer with no account and I'm on the registration page
Acceptance Criteria	<b>When</b> I fill in the "Username", "E-mail" and "Password" fields with my authentication credentials and I click the register button
	Then the system registers me in

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1-Click on register button	
	2- go to registration page
<ul><li>1- User Enter name, email and Password.</li><li>2- Click Submit</li></ul>	
	<ul><li>3- System send OTP to email</li><li>4- go to OTP page</li></ul>
5- User type OTP	
	6- System verifies OTP and credentials

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# **Software Requirements Specifications**

# **Exceptional Scenarios**

#### Scenario 1:

Actor Action	System Response
1-Click on register button	
	2- go to registration page
<ul><li>1- User Enter name, email and Password.</li><li>2- Click Submit</li></ul>	
	<ul><li>3- system verify credentials</li><li>3- System send OTP to email</li><li>4- go to OTP page</li></ul>
5- User type OTP	
	<ul><li>6- System fails to verify OTP</li><li>7- Display wrong OTP message</li></ul>

#### Scenario 2:

Actor Action	System Response
1-Click on register button	
	2- go to registration page
<ul><li>1- User Enter name, email and Password.</li><li>2- Click Submit</li></ul>	
	<ul><li>3- system fails to verify email</li><li>4- System send wrong email format message</li></ul>

### Scenario 3:

Actor Action	System Response
1-Click on register button	
	2- go to registration page
<ul><li>1- User Enter name, email and Password.</li><li>2- Click Submit</li></ul>	
	<ul><li>3- system fails to verify number</li><li>4- System send wrong number format message</li></ul>

#### Scenario 4:

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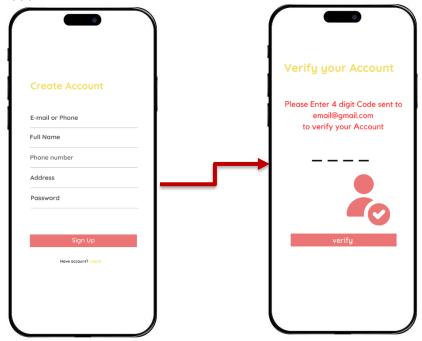


**Software Requirements Specifications** 

Actor Action	System Response
1-Click on register button	
	2- go to registration page
<ul><li>1- User Enter name, email and Password.</li><li>2- Click Submit</li></ul>	
	<ul><li>3- system fails to verify password</li><li>4- System send wrong password format message</li></ul>

### • Screen Design

#### Happy scenario:

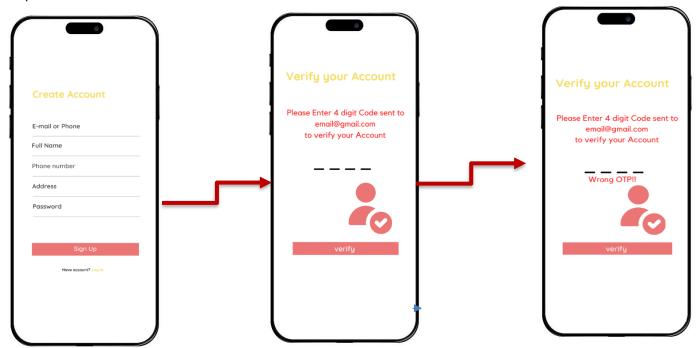


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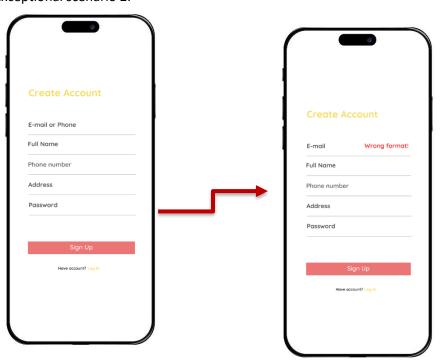


# **Software Requirements Specifications**

Exceptional scenario 1:



#### Exceptional scenario 2:

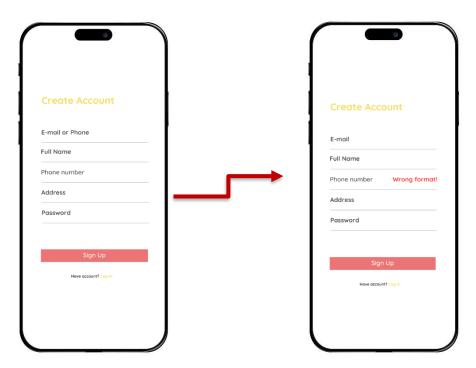


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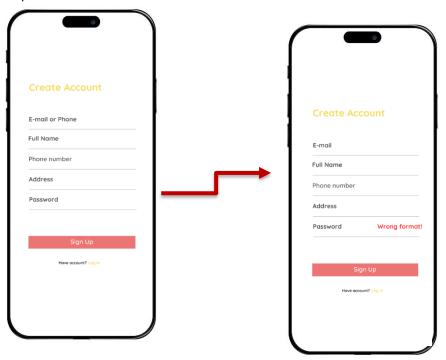


# **Software Requirements Specifications**

Exceptional scenario 3:



#### Exceptional scenario 4:





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# **Software Requirements Specifications**

### • Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	String < 30	Only alphabetic characters
Password	String > 8	Must contain Upper, lower case, numbers and symbols
E-mail	String < 50	Must follow standard email format
Phone	Integers = 11	Only integers numbers & must be valid number starting with 012-011-010.
Address	String < 50	-
OTP	Integer = 4	Must be the same as sent

### User Story #2

User Story ID	US #2
User Story Name	No account restriction
Actors	General customer
	<b>As</b> a general customer
Description	I <b>like</b> to not be able to access any functionality but displaying items
	<b>So</b> the user experience stays safe and to encourage having an account
Pre condition	-
Post condition	
	<b>Given</b> I'm a general customer with no account and I want to use the application
Acceptance Criteria	<b>When</b> I try to use the application functionalities other than displaying items
	Then the system should restrict me and redirect me to log in page

#### Scenarios

**Normal Scenario** 

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**Software Requirements Specifications** 

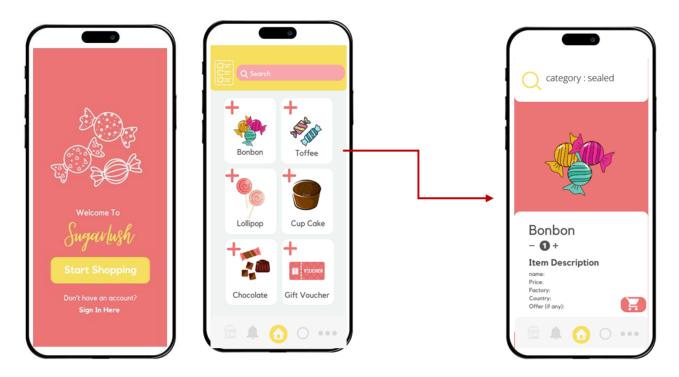
Actor Action	System Response
1-Customer enters the Application system	
	2- system shows the catalog and items available

### **Exceptional Scenario**

Actor Action	System Response
1- Customer clicks on anything other than display items in the application	
	2- System redirect user to log in page

### Screen Design

#### **Normal Scenario:**



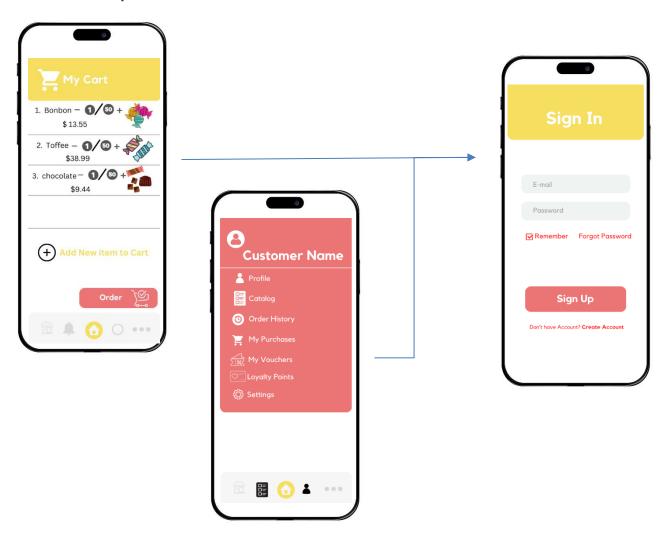


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# **Software Requirements Specifications**

### **Exceptional Scenario:**



### • Data Dictionary:

<b>Element Label</b>	Type/Length	Data Validation / Business Rule
password	String/minimum 8	Must contain Upper, lower case, numbers and symbols
email	String/at most 50	Must follow standard email format

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# **Software Requirements Specifications**

### User Story #3

User Story ID	US #3
User Story Name	Edit account information
Actors	Customer
	As a customer
Description	I <b>like</b> to be able to access my account information
	<b>So</b> I can be able to edit it
Pre condition	
Post condition	
Acceptance Criteria	<b>Given</b> I'm a customer with an account and I want access and edit my information <b>When</b> I click on my profile
	<b>Then</b> the system displays my information, and I can be able to edit them

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1-Click on profile	
	<ul><li>2- redirect customer to his profile page</li><li>3- display profile information</li></ul>
4-Click on edit profile info	
	5- display editing options

### **Exceptional Scenario**

No exceptional scenario

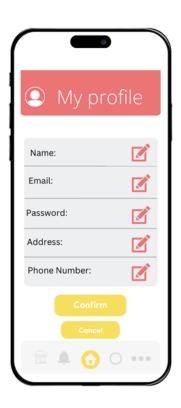


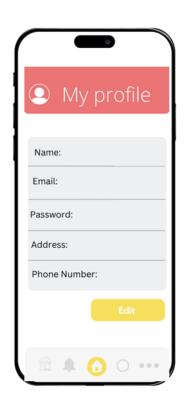
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# Software Requirements Specifications

Screen Design





Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	String < 30	Only alphabetic characters
Password	String > 8	Must contain Upper, lower case, numbers and symbols
E-mail	String < 50	Must follow standard email format
Phone	Integers = 11	Only integers numbers & must be valid number starting with 012-011-010.
Address	String < 50	-

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# **Software Requirements Specifications**

# • User Story #4

User Story ID	US #4
User Story Name	Forgot password
Actors	Customer
	<b>As</b> a customer
Description	I <b>like</b> to be able to have a forgot password option
	<b>So</b> I can be able to change my password and log in again
Pre condition	
Post condition	
	Given I'm a customer that forgot his password
Acceptance Criteria	When I click on forgot password button
	Then the system sends an OTP to my email to log in with

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1-while signing in the customer Click on forgot	
password	
	2- redirect user to OTP page
3-Type Email address	
	4- verify email address
	5- Send OTP to user email
6-Type OTP	
	7- Verify OTP
	8-redirect user to his profile

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# Software Requirements Specifications

### **Exceptional Scenario**

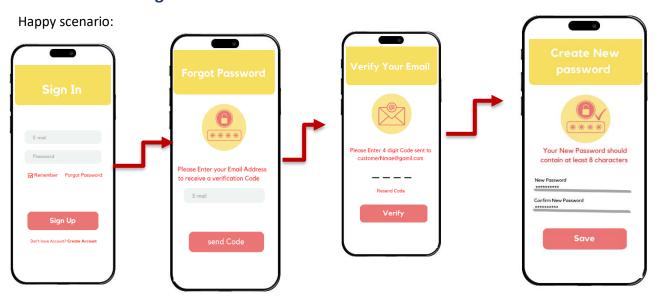
#### Scenario 1:

cenario 1.	
Actor Action	System Response
1-Click on forgot password	
	2- redirect user to OTP page
3-Type Email address	
	4- verify email address
	5- email not found
	6- display email not found message

#### Scenario 2:

Actor Action	System Response
1-Click on forgot password	
	2- redirect user to OTP page
3-Type Email address	
	4- verify email address
	5- Send OTP to user email
6-Type OTP	
	7- Verify OTP
	8- OTP is not correct
	9- display OTP is not correct message

### Screen Design



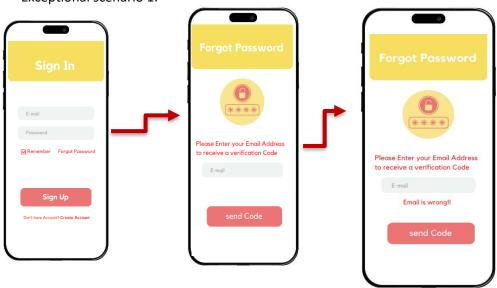


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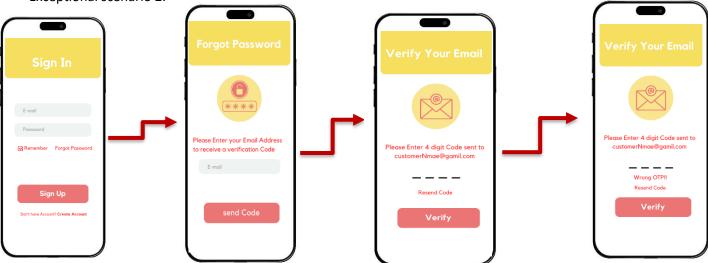


# **Software Requirements Specifications**





#### Exceptional scenario 2:



### Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Password	String > 8	Must contain Upper, lower case, numbers and symbols
E-mail	String < 50	Must follow standard email format
OTP	Integer = 4	Must be the same as sent

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# **Software Requirements Specifications**

### • User Story #5

User Story ID	US #5
<b>User Story Name</b>	Search for items
Actors	Customer
	As a customer
Description	I <b>like</b> to be able to search for items
	<b>So</b> I can find items by category or name
Pre condition	
Post condition	
	Given I'm a customer
Acceptance Criteria	<b>When</b> I open catalog page
	Then the system gives me option to search by item or category

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1-Open Catalog page	
	2- display Catalog page
3-choose category	
4- search by name	
	5-display results based on filters

### **Exceptional Scenario**

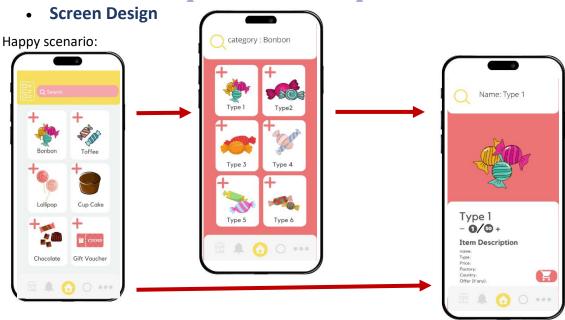
Actor Action	System Response
1-Open Catalog page	
	2- display Catalog page
3-choose category 4- search by name	
	5-no items found 6- display no items found message



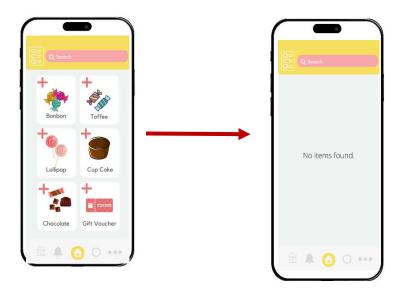
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# **Software Requirements Specifications**



#### Exceptional scenario:



### Data Dictionary

Element Label	Type/Length	Data Validation / Business Rule
Item name	String <20	-

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# **Software Requirements Specifications**

### • User Story #6

User Story ID	US #7
<b>User Story Name</b>	Add to cart
Actors	Customer
	As a customer
Description	I <b>like</b> to be able to add to cart
	<b>So</b> I can make an order
Pre condition	
Post condition	
	Given I'm a customer
	<b>When</b> I open Add to cart
Acceptance Criteria	<b>Then</b> items I selected with specified quantities should be added to my cart, more than 10 kgs cant pay on delivery, one should pay by other 3 methods.

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1-specify item quantity	
	2-system checks quantity 3-quanitity is valid
4- click add to cart	
	5- system adds item to the cart

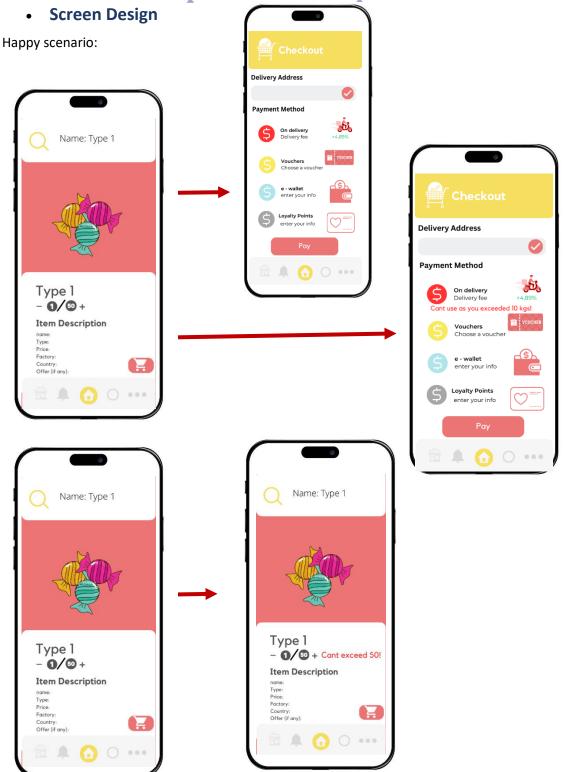
# **Exceptional Scenario**

Actor Action	System Response
1-specify item quantity	
	2-system checks quantity 3-quanitity is not valid 4- display can't exceed 50
4- click add to cart	
	5- system adds item to the cart

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**Software Requirements Specifications** 



Project: SUGARLUSH



# **Software Requirements Specifications**

• User Story #7

User Story ID	US #7
<b>User Story Name</b>	Address verification
Actors	Customer
	<b>As</b> a customer
Description	I <b>like</b> to specify address of place of delivery
	<b>So</b> I can have the option of either choosing the same or different
	address
Pre condition	
Post condition	
	Given I'm a customer
Acceptance Criteria	<b>When</b> I check out
	Then I should specify the address of place of delivery

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1-checkout	
	2-ask for address
4- type address	
	5- verify address

### **Exceptional Scenario**

No exceptional

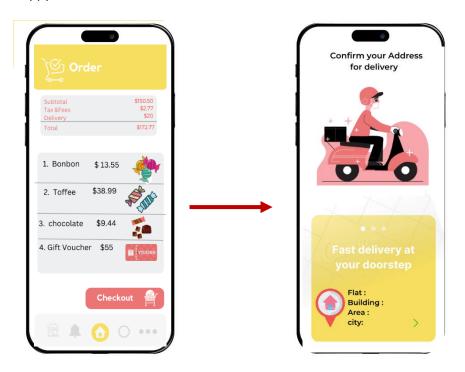
Project: SUGARLUSH



# Software Requirements Specifications

• Screen Design

Happy scenario:



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Flat – Building – Area – City	String > 50	-

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# **Software Requirements Specifications**

### • User Story #8

User Story ID	US # 8
User Story Name	Payment as cash on delivery.
Actors	Customer
Description	As a customer who would pay on delivery  I like to be able to proceed with the payment in different methods such as Cash payment on delivery and enter my phone number  So that I can have a variety of options to pay with flexibility pay later on delivery and receive an OTP for verification.
Pre condition	Made an order
Post condition	
Acceptance Criteria	Given I'm a logged-in customer and I am ordering an order of some products, in checkout process  When I have to pay the amount of the order, I should have the option of paying on delivery using cash while making the purchase.  Then the system proceeds with the payment process and should appear entering phone number field and I cannot proceed with the checkout until I enter valid OTP.

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- The customer selects the on-delivery option.	
	2- System displays page to enter a phone number to send OTP on it.
3- customer enters a valid phone number	
	4- system sends to the phone number entered an OTP code
5- customer receives OTP code on his entered phone number.	
	6 - system shows filed to enter the OTP Code 7- system verify the OTP and allow the customer to proceed the checkout process, showing confirmation message.
8- customer checkout the purchase & can view the order in current orders page.	
	9-delivery agent collects cash from customer

### **Exceptional Scenario**

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# **Software Requirements Specifications**

#### Scenario 1:

Actor Action	System Response
1- customer is in the checkout page and choose method of payment as 'on delivery'.	
	2- System displays page to enter a phone number to send OTP on it.
3- customer enters a valid phone number	
	4- system sends to the phone number entered an OTP code
5- customer receives OTP code and enter incorrect code.	
	6- system displays error message and prompts the customer to reenter the code and proceed the checkout process.

#### Scenario 2:

Actor Action	System Response
1- customer is in the checkout page and choose method of payment as 'on delivery'.	
	2- System displays page to enter a phone number to send OTP on it.
3- customer enters incorrect phone number	
	4- system displays error message stating that the phone entered is wrong and prompts the customer to enter a valid phone number.

#### Scenario 3:

Actor Action	System Response
1- customer is in the checkout page and choose method of payment as 'on delivery'.	
	2- System displays page to enter a phone number to send OTP on it.
3- customer enters a valid phone number	
	4- system sends to the phone number entered an OTP code
5- customer doesn't receive an OTP code	
	6- system allow the customer to click retry sending button to re send the OTP code or to enter Different phone number.

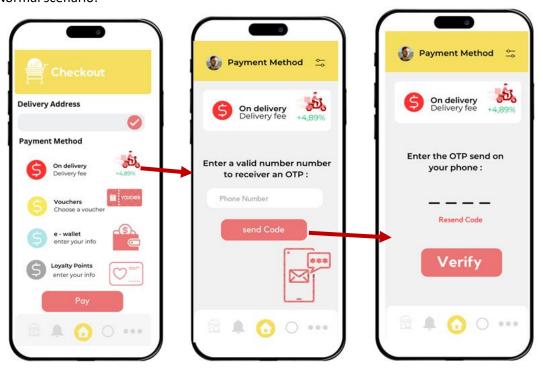
Project: SUGARLUSH



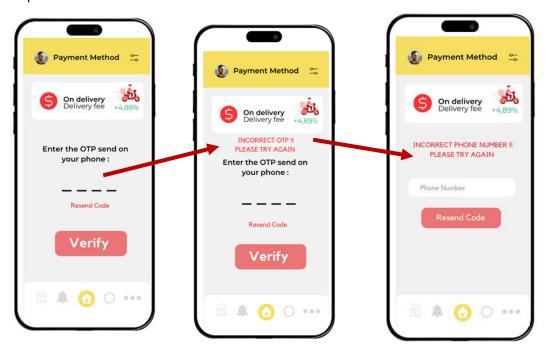
# **Software Requirements Specifications**

### • Screen Design

Normal scenario:



#### Exceptional scenario:



Project: SUGARLUSH



# **Software Requirements Specifications**

### • Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Phone Number	Integer = 11	Only integers numbers / must be valid number starting with 012-011-010.
OTP code	Integer = 4	Only integers numbers / must be valid code, matches with the created in the system.

### • User Story # 9

User Story ID	US # 9
<b>User Story Name</b>	Payment as E-wallet.
Actors	Customer
Description	As a customer I like to be able to proceed with the payment in different methods such as using E-wallet. So that I can have a variety of options to pay with flexibility paying in other platforms.
Per condition	Made an order
Post condition	
Acceptance Criteria	Given I'm a logged-in customer and I am ordering an order of some products, in checkout process  When I have to pay the amount of the order, I should have the option of paying using E-wallet while making the purchase.  Then the system proceeds with the payment process.

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- The customer selects the e-wallet option.	
	2- System displays page to enter the information of the e-wallet to be used.
3- customer enters the information required.	
	4- system redirects the user to the third- party payment platform to complete the transaction securely.
5- The customer makes the payment on the other platform.	

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# **Software Requirements Specifications**

6- customer confirms the payment on the application.	
	7– system allows the customer to proceed with the checkout process, showing confirmation message.
8- Customer checkout the purchase.	
9- Customer can view the order in current orders page.	
	10- the customer receives a payment receipt through his mail.

### **Exceptional Scenario**

Actor Action	System Response
1- The customer selects the e-wallet option.	
	2- System displays page to enter the information of the e-wallet to be used.
3- customer enters the information required.	
	4- system redirects the user to the third- party payment platform to complete the transaction securely.
5- The customer makes the payment on the other platform and confirms it on the application.	
	<ul><li>6- The payment fails to be made.</li><li>7- system sends a feedback message to the customer</li></ul>
	8- system prompts the customer to try again or choose another different way of payment.
9- the customer tries again / choosing another way of payment.	
	10– system allows the customer to proceed with the checkout process, showing confirmation message.
11- Customer checkout the purchase & can view the order in current orders page.	

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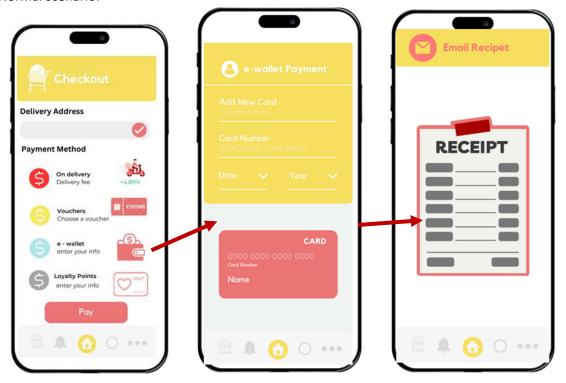


# **Software Requirements Specifications**

12- the customer receives a payment receipt through his mail.

# • Screen Design

#### Normal scenario:



Project: SUGARLUSH



# **Software Requirements Specifications**

Exceptional scenario:



### • Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Add New e-Wallet Account	String	
Card Number	Integer =16	Only integers numbers
Date &year	Date format	

### • **User Story** # 10

User Story ID	US # 10
<b>User Story Name</b>	Payment as redeeming vouchers.
Actors	Customer
Description	As a customer I like to be able to proceed with the payment in different methods such as redeeming gift vouchers I have. So that I can have a variety of options to pay with flexibility while using the gifts from the store or friends, have a discount on the amount of my purchase.

Project: SUGARLUSH



# Software Requirements Specifications

Per condition	Made an order
Post condition	
Acceptance Criteria	Given I'm a logged-in customer and I am ordering an order of some products, in checkout process I want to be able to use a gift voucher code on my order, but only once, so that I can receive a discount on my purchase.  When I have to pay the amount of the order, I should have the option of paying using gift vouchers while making the purchase before it expires the system makes sure of its validity  Then the system proceeds with the payment process and reduce the total price I need to pay during the payment step and if I use a voucher with a higher amount than the required checkout amount of money, the system will detect the excess amount and create a new voucher with the remaining balance to be saved in my account.

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- The customer selects the redeeming gift vouchers option.	
	2- System displays gift voucher page to enter the valid code.
3- customer enters the voucher code and click on apply now	
	4- system verify the code entered
	5- system reduce the total price by the amount specified on the voucher.
	6 – system allows the customer to proceed with the checkout process, showing confirmation message.
7-customer checkout the purchase & can view the order in current orders page.	
	8- the customer receives a payment receipt through his mail.

### **Exceptional Scenario**

#### Scenario 1:

Actor Action	System Response
1- customer is in the checkout page and	
choose method of payment is gift voucher	

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# **Software Requirements Specifications**

	2- System displays gift voucher page to enter the valid code.
3- customer enters invalid voucher code (used on a pervious order) and click on apply now	
	4- system shows error message stating that the voucher is invalid to use.

#### Scenario 2:

Actor Action	System Response
1- customer is in the checkout page and choose method of payment is gift voucher	
	2- System displays gift voucher page to enter the valid code.
3- customer enters expired voucher code and click on apply now	
	4- system shows error message stating that the voucher is expired to be used.

#### Scenario 3:

Actor Action	System Response
1- customer is in the checkout page and choose method of payment is gift voucher	
	2- System displays gift voucher page to enter the valid code.
3- customer enters voucher code with higher amount than required and click on apply now	
	<ul> <li>4- system reduce the total price by the amount specified on the voucher and proceed the checkout process.</li> <li>5- system creates a new voucher with the remaining balance from the voucher used.</li> <li>6- total voucher balance is updated in the customer account.</li> </ul>

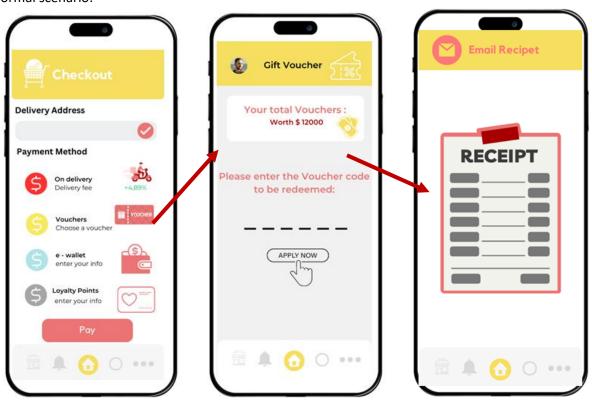
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## **Software Requirements Specifications**

## • Screen Design

Normal scenario:

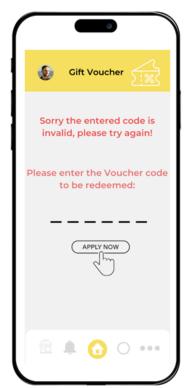


Project: SUGARLUSH

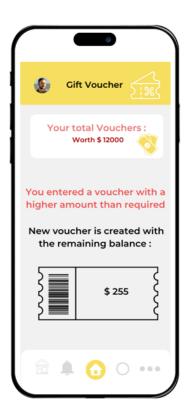


# **Software Requirements Specifications**

Exceptional scenario:







## • Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Voucher code	Integer = 6	Only integers numbers / must be valid code.

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## **Software Requirements Specifications**

• User Story # 11

User Story ID	US # 11	
User Story Name	Payment as Loyalty points.	
Actors	Customer	
Description	As a loyal customer  I like to be able to proceed with the payment in different methods such as using loyalty points I have.  So that I can have a variety of options to pay with flexibility while using the points from the store as a gift for being loyal.	
Per condition	Made an order	
Post condition		
Acceptance Criteria	<b>Given</b> I'm a logged-in customer and I am ordering an order of some products, in checkout process <b>When</b> I have to pay the amount of the order, I should have the option of paying using my loyalty points while making the purchase. <b>Then</b> the system proceeds with the payment process.	

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- The customer selects the loyalty points option.	
	2- System refers to the loyalty points balance in the customer account and calculates the number of points needed then reduces the amount required from the balance in the customer account.
	3– system allows the customer to proceed with the checkout process, showing confirmation message.
4- Customer checkout the purchase & can view the order in current orders page.	
	5- the customer receives a payment receipt through his mail.

## **Exceptional Scenario**

Actor Action	System Response
1- The customer selects the loyalty points	
option.	

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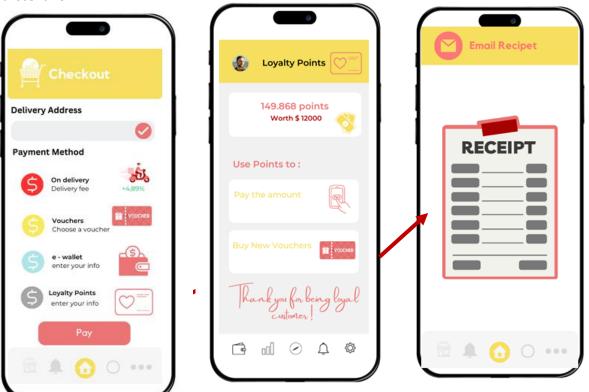


## **Software Requirements Specifications**

	2- loyalty points balance in the customer account isn't enough to complete the payment.
	3- system prompts the user to choose a different payment method to complete the transaction.
4- the customer chooses another method of payment.	
	5– system allows the customer to proceed with the checkout process, showing confirmation message.
6- Customer checkout the purchase & can view the order in current orders page.	
	7- the customer receives a payment receipt through his mail.

## • Screen Design

Normal scenario:

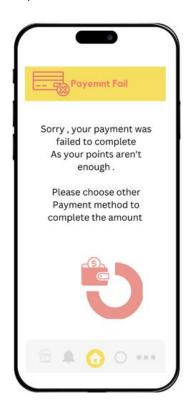


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# **Software Requirements Specifications**

Exceptional scenario:



• User Story #12

User Story ID	US # 12
<b>User Story Name</b>	Get loyalty points
Actors	Customer
Description	As a customer  I like to be able to get loyalty points on my order in my account  So that I use them later as a payment method on my orders.
Per condition	Made an order
Post condition	
Acceptance Criteria	Given I'm a logged-in customer and I ordered an order of some products  When I order the product, I get loyalty points upon the scheme set by the admin of the system, which is proportional to the amount I've spent.

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## **Software Requirements Specifications**



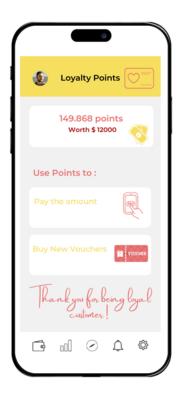
**Then** the system updates these points after each order done by the customer, and he should be able to view the current loyalty points balance in his account & use it in the checkout – payment process.

### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- customer places his order	
	2- System calculates the loyalty points the
	customer would earn based on the scheme
	set.
	3- loyalty points balance has been updated
	in the customer account.

### Screen Design



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Project: SUGARLUSH



## **Software Requirements Specifications**

## • User Story #13

User Story ID	US #13	
<b>User Story Name</b>	View order history & reorder pervious orders.	
Actors	Customer	
Description	As a customer I like to be able to view my order history So that I can reorder the same order or view the order I already ordered before, while saving my time and effort.	
Per condition	Made an order	
Post condition	availability of the product currently	
Acceptance Criteria	Given I'm a logged-in customer and I ordered an order of some products  When I view the order history from the previous orders page, it displays a list of my previous orders with details like order date, items ordered, and payment method. I can reorder the same exact pervious order with the same conditions including the quantities, address and way of payment shown in the previous order history.  Then the system makes the order automatically without the use of adding from cart or different procedures, after checking the availability of the products in the stock.	

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
	System Response
1- customer clicks on view order history of an	
order from pervious orders page.	
	2- System displays the pervious order
	history.
3- customer can select to reorder the pervious	
order through clicking "Reorder" button	
	4- system makes sure of the quantity
	available in stock.
	5- System generates the order
	automatically.
6- user can view the order as new one in orders history page.	

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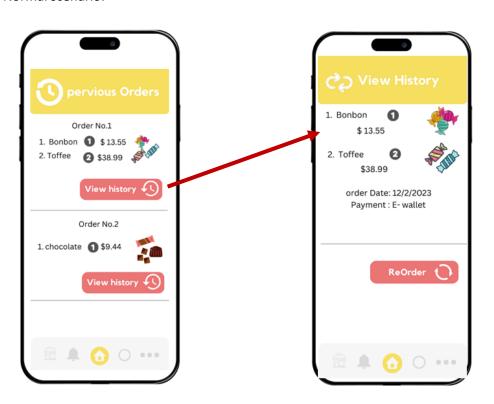
## **Software Requirements Specifications**

**Exceptional Scenario** 

Actor Action	System Response
1- customer clicks on view order history from	
his profile menu	
	2- System displays the pervious order
3- customer can select to reorder the pervious	
order through clicking "Reorder" button	
	4- quantity required isn't available
	5- system rejects the order and displays the
	feedback message stating the product
	needed isn't available.

### • Screen Design

Normal scenario:



Project: SUGARLUSH



# **Software Requirements Specifications**

Exceptional scenario:



User Story #14

User Story ID	US #14
<b>User Story Name</b>	Cancel Order
Actors	Customer
Description	As a customer  I'd like to be able to cancel my order within 24 hours of placing it  So that I don't receive it and get refunded if I change my mind.
Per condition	Made an order
Post condition	
Acceptance Criteria	Given I'm a logged-in customer and I ordered an order of some products within 24 hours I can cancel it.  When I cancel the order  Then the system cancels the order and processes the refund based on the payment method used. If it was an e-wallet the system refunds it as loyalty points in my account.

Scenarios

Project: SUGARLUSH



## Software Requirements Specifications

#### **Normal Scenario**

Actor Action	System Response
1- customer clicks on cancel order	
	2- system checks if the order is done within or less than 24 hours to cancel 3- system checks if payment was made earlier, the money would be refunded as loyalty points credited to the user account. If payment was to be on delivery the system cancels the payment, and no further action is taken. 4- system cancels the order and sends
	feedback message to the user.

### **Exceptional Scenario**

Actor Action	System Response
1- customer clicks on cancel order	
	2-24 hours were passed on order so
	canceling couldn't occur.
	3- system reject to cancel the order and
	sends feedback message to the user.

### Screen Design

Normal scenario:



#### Exceptional scenario:



Project: SUGARLUSH



## **Software Requirements Specifications**

## • User Story #15

User Story ID	US #15
<b>User Story Name</b>	Add item to Catalog
Actors	Admin
Description	As an admin  I'd like to be able to update the catalog  So that I can add an item to the catalog
Per condition	
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on Update catalog. Then the system opens the catalog page

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- Admin click on update catalog	
	2- system opens update catalog page
3- Admin click on add item	
	4- System displays a form to fill information about the new item.
5- Admin click confirm	
	6-System save new item's info and display the catalog again with the new item added.

#### **Exceptional Scenario**

No exceptional scenario for this case.

Project: SUGARLUSH



## **Software Requirements Specifications**

• Screen Design



## • Data Dictionary:

Type/Length	Data Validation / Business Rule
Text < 50 Characters	Structured text
Integer < 4 digits	Integer > 0
Text < 50 characters	Structured text
Text < 50 characters	Structured text
	Text < 50 Characters Integer < 4 digits Text < 50 characters

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## Software Requirements Specifications

### • User Story #16

User Story ID	US #16
<b>User Story Name</b>	Delete item from catalog
Actors	Admin
Description	As an Admin I'd like to be able to update the catalog So, I can delete any item in the catalog
Per condition	Existence of that item
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on Update catalog. Then the system opens the catalog page

#### Scenarios

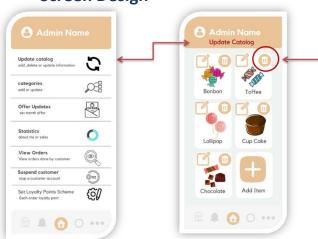
#### **Normal Scenario**

Actor Action	System Response
1- Admin Click on update catalog	
	2- system display update catalog page
3- Admin click on bin button beside any item	
	4- system delete that item from catalog

#### **Exceptional Scenario**

No exceptional scenario for this case.

### Screen Design





Project: SUGARLUSH



# **Software Requirements Specifications**

## User Story #17

User Story ID	US #17
<b>User Story Name</b>	Edit item info
Actors	Admin
Description	As an Admin I'd like to be able to update the catalog So, I can edit any item info
Per condition	Existence of that item
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on Update catalog. Then the system opens the catalog page, and I can edit it.

### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- Admin Click on update catalog	
	2- system display update catalog page
3- Admin click on edit button beside any item	
	4- system display information of the item
<ul><li>5- Admin change item's price, name or category.</li><li>6- Admin click submit changes</li></ul>	
	7- system save the new information and display the catalog page.

#### **Exceptional Scenario**

No exceptional scenario for this case.



Project: SUGARLUSH



# **Software Requirements Specifications**

• Screen Design



• User Story #18

User Story ID	US #18
<b>User Story Name</b>	View, Add or Delete category
Actors	Admin
Description	As an Admin I'd like to be able to control categories So, I can view or update categories
Per condition	
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on Categories. Then the system displays the categories page

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## Software Requirements Specifications

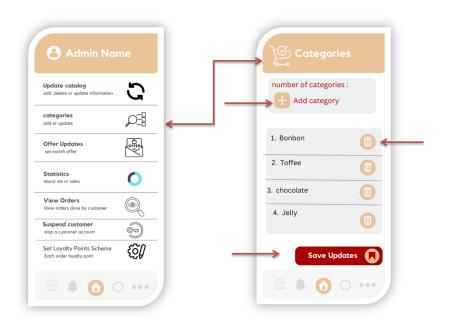
# ScenariosNormal Scenario

Actor Action	System Response
1- Admin Click on categories	
	2- system display categories page
3- Admin click on add category button	
	4- system allows him to enter its name
5- Admin enters the name.	
	6- system add the new category name to the list of categories
<ul><li>7- Admin click on delete icon of any category</li><li>8- Admin click save updates button</li></ul>	
	8- system save the new updates and go back to home page

### **Exceptional Scenario**

No exceptional scenario for this case.

### • Screen Design



Project: SUGARLUSH



# **Software Requirements Specifications**

## • Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Category name	Text < 50 Characters	Structured text
No. of Categories	Integer < 3 digits	Integer >= 0

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## • User Story #19

User Story ID	US #19
<b>User Story Name</b>	Offer updates
Actors	Admin
Description	As an Admin I'd like Update offers So that I can add, delete or edit the offers in the store.
Per condition	
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on Offer updates. Then the system displays the offer updates page

## Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- Admin Click on offer updates	
	2- system display offer updates page
3- Admin click on add offer button	
	4- system allows him to enter its name
5- Admin enters the name.	
	6- system add the new category name to the list of categories
7- Admin click on delete icon of any offer	
	8- system display offer list without that offer



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## **Software Requirements Specifications**

9- Admin click on edit icon of any offer	
	10- system display offer info
11-Admin change the info he wants 12-Admin click save updates button	
	13- system display offer list with the required changes

### **Exceptional Scenario**

No exceptional scenario for this case.

## • Screen Design



## • Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Offer name	Text < 50 Characters	Structured text
No. of offers	Integer < 3 digits	Integer >= 0

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Project: SUGARLUSH



## **Software Requirements Specifications**

• User Story #20

User Story ID	US #20
<b>User Story Name</b>	View Statistics
Actors	Admin
Description	As an Admin  I'd like Know Statistics  So I can view sales statistics or my own statistics
Per condition	
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on Statistics. Then the system displays the Statistics page

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- Admin Click on Statistics	
	2- system display Statistics page
3- Admin click on my statistics	
	4- system display admin statistics
5- Admin click on daily	
	6- system displays the sales daily statistics
7- Admin click on monthly	
	8- system displays the sales monthly statistics
9- Admin click on specific item	
	10- system display each item statistics on the same graph

### **Exceptional Scenario**

No exceptional scenario for this case.



Project: SUGARLUSH



## **Software Requirements Specifications**

• Screen Design



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### User Story #21

User Story ID	US #21
User Story Name	View and cancel Orders
Actors	Admin
Description	As an Admin I'd like Know orders So, I can view orders in detail and cancel any of them
Per condition	
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on View Orders. Then the system displays the Orders page containing all the orders done by different customers.

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# **Software Requirements Specifications**

#### Scenarios

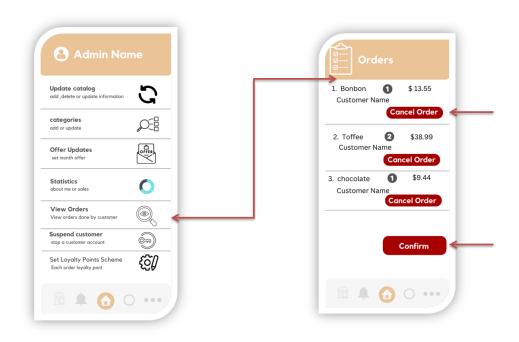
#### **Normal Scenario**

Actor Action	System Response
1- Admin Click on Orders	
	2- system display orders page
3- Admin click on cancel order button	
	4- system delete that order
5- Admin click confirm button	
	6- system saves the updates and go back to home page

#### **Exceptional Scenario**

No exceptional scenario for this case.

### • Screen Design



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Project: SUGARLUSH



## **Software Requirements Specifications**

## • User Story #22

User Story ID	US #22
<b>User Story Name</b>	Suspend customer
Actors	Admin
Description	As an Admin I'd like Suspend customer So, I can view customers and suspend the customer I want based on their behavior.
Per condition	
Post condition	
Acceptance Criteria	Given I'm a registered admin and I'm on the Home page When I click on Suspend customer. Then the system displays the customer's page

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- Admin Click on suspend customer	
	2- system display customers' page
3- Admin enter the required customer name in search bar	
Harrie III Search Dai	
	4- system searches for that customer
5- Admin click on suspend button	
	6- system suspends that customer
7-Admin click on confirm button	
	8- system go back to the home page

## **Exceptional Scenario**

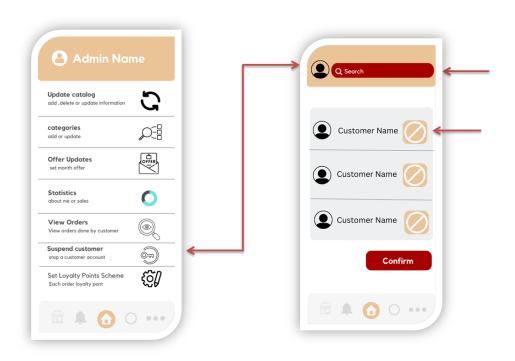
Actor Action	System Response
1- Admin enter the required customer name in search bar	
	<ul><li>2- system searches for that customer but not find him/her</li><li>3- system return a message to the user that there are no results</li></ul>

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# **Software Requirements Specifications**

Screen Design
 Normal scenario:

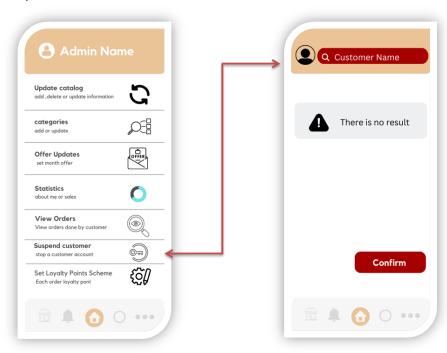


Project: SUGARLUSH



# **Software Requirements Specifications**

#### Exceptional scenario:



## User Story #23

User Story ID	US #23
<b>User Story Name</b>	Set loyalty point scheme
Actors	Admin
Description	As an Admin  I'd like set loyalty point scheme  So, I set or edit the current one
Per condition	
Post condition	
Acceptance Criteria  Given I'm a registered admin and I'm on the Home page When I click on set loyalty points scheme. Then the system displays set loyalty points scheme	

Project: SUGARLUSH



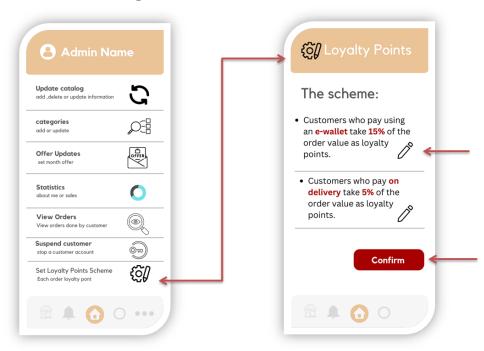
# **Software Requirements Specifications**

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- Admin Click on set loyalty points scheme	
	2- system display set loyalty points scheme page
3- Admin click on the edit icon	
	4- system allows the admin to change the current scheme
5- Admin click on confirm button	
	6- system save the scheme after the modifications

## • Screen Design



### User Story #24

User Story ID	US #24
<b>User Story Name</b>	Update Admins
Actors	Owner

Project: SUGARLUSH



## **Software Requirements Specifications**

Description	As an Owner  I'd like to control admins  So I can add new admin or remove existing one
Per condition	
Post condition	
Acceptance Criteria	Given I'm an owner and I'm on the control page When I click on remove button beside any admin. Then the system removes that admin.

#### Scenarios

#### **Normal Scenario**

Actor Action	System Response
1- Owner click on remove button beside specific admin	
	2- system removes that admin
3- Owner click on add button	
	4- system allows him to add new admin to admins list
5- Admin click confirm button	
	6- system saves the updates and go back to home page

#### **Exceptional Scenario**

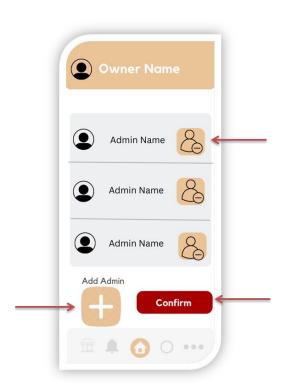
No exceptional scenario for this case.

Project: SUGARLUSH



# **Software Requirements Specifications**

• Screen Design



## **Ownership Report**

Student	Items he created
Alan Samir Hakoun	Parts of use case Model, parts of Functional & Non - Functional Requirements,
	Document Purpose and Audience, System Navigation Map, user stories.
Sohaila Abdelazim Khalifa	Parts of use case Model, parts of Functional & Non-Functional Requirements,
	Software Scope, System Navigation Map, user stories.
Sara Tamer Mohamed	Parts of use case Model, parts of Functional & Non - Functional Requirements,
	Software Purpose, System Navigation Map, user stories.